

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A method for controlling electronic devices through a host device, the method comprising:

establishing electronic communications between the host device and a controlled device;
assigning a control frequency for the controlled device using a 2^N time slicing algorithm,
where N is a non-negative integer, wherein each control frequency that is assigned has a value of 2^N ;

generating, at the host device, control input for the controlled device; and
sending the control input to the controlled device at the assigned control frequency.

Claim 2 (original): The method of claim 1, further comprising receiving, at the host device, output from the controlled device in response to the control input.

Claim 3 (original): The method of claim 1, wherein establishing electronic communications comprises establishing real-time electronic communications over a network.

Claim 4 (original): The method of claim 1, further comprising establishing real-time electronic communications with a plurality of controlled devices and assigning a discrete control frequency for each controlled device using the 2^N time slicing algorithm, where N is a non-negative integer.

Claim 5 (original): The method of claim 4, wherein N is independently determined for each controlled device of the plurality of the controlled devices.

Claim 6 (original): The method of claim 1, wherein the 2^N time slicing algorithm comprises assigning the control frequency at 2^N hertz, where N is a non-negative integer that will yield a discrete control frequency in proximity to a preferred control frequency of the controlled device.

Claim 7 (original): The method of claim 1, further comprising initiating a control loop process on the host device when electronic communication is established with a controlled device.

Claim 8 (original): The method of claim 1, further comprising accessing the host device from a remote computing device via the Internet.

Claim 9 (original): The method of claim 8, further comprising providing information relating to the controlled device to a user at the remote computing device.

Claim 10 (original): The method of claim 9, further comprising receiving user input at the host device from the user at the remote computing device, wherein the input relates to the controlled device.

Claim 11 (currently amended): A computing device configured for controlling electronic devices, the computing device comprising:

a processor;

memory in electronic communication with the processor; and

executable instructions executable by the processor, wherein the executable instructions

are configured to implement a method comprising:

establishing electronic communications between the computing device and a controlled device;

assigning a control frequency for the controlled device using a 2^N time slicing algorithm, wherein N is a non-negative integer, wherein each control frequency that is assigned has a value of 2^N ;

generating, at the computing device, control input for the controlled device; and sending the control input to the controlled device at the assigned control frequency.

Claim 12 (original): The computing device of claim 11, wherein the method further comprises receiving, at the computing device, output from the controlled device in response to the control input.

Claim 13 (original): The computing device of claim 11, wherein establishing electronic communications comprises establishing real-time electronic communications over a network.

Claim 14 (original): The computing device of claim 11, wherein the method further comprises establishing real-time electronic communications with a plurality of controlled devices and assigning a discrete control frequency for each controlled device using the 2^N time slicing algorithm, where N is a non-negative integer.

Claim 15 (original): The computing device of claim 14, wherein N is independently determined for each controlled device of the plurality of controlled devices.

Claim 16 (original): The computing device of claim 11, wherein the 2^N time slicing algorithm comprises assigning the control frequency at 2^N hertz, where N is a non-negative integer that will yield a discrete control frequency in proximity to a preferred control frequency of the controlled device.

Claim 17 (original): The computing device of claim 11, wherein the method further comprises initiating a control loop process on the computing device when electronic communication is established with a controlled device.

Claim 18 (original): The computing device of claim 17, wherein the method further comprises initiating a torque/current control loop process at a microcontroller on the controlled device when the controlled device comprises a motor.

Claim 19 (original): The computing device of claim 11, wherein the method further comprises accessing the computing device from a remote computing device via the Internet.

Claim 20 (original): The computing device of claim 19, wherein the method further comprises providing information relating to the controlled device to a user at the remote computing device.

Claim 21 (original): The computing device of claim 20, wherein the method further comprises receiving user input at the computing device from the user at the remote computing device, wherein the input relates to the controlled device.

Claim 22 (currently amended): A computer-readable medium for storing program data, wherein the program data comprises executable instructions for implementing a method in a computing device for controlling electronic devices, the method comprising:

establishing electronic communications between the computing device and a controlled device;

assigning a control frequency for the controlled device using a 2^N time slicing algorithm, where N is a non-negative integer, wherein each control frequency that is assigned has a value of 2^N ;

generating, at the computing device, control input for the controlled device; and sending the control input to the controlled device at the assigned control frequency.

Claim 23 (original): The computer-readable medium of claim 22, wherein the method further comprises receiving, at the computing device, output from the controlled device in response to the control input.

Claim 24 (original): The computer-readable medium of claim 22, wherein establishing electronic communications comprises establishing real-time electronic communications over a network.

Claim 25 (original): The computer-readable medium of claim 22, wherein the method further comprises establishing real-time electronic communications with a plurality of controlled devices and assigning a discrete control frequency for each controlled device using the 2^N time slicing algorithm, where N is a non-negative integer.

Claim 26 (original): The computer-readable medium of claim 25, wherein N is independently determined for each controlled device of the plurality of controlled devices.

Claim 27 (original): The computer-readable medium of claim 22, wherein the 2^N time slicing algorithm comprises assigning the control frequency at 2^N hertz, where N is a non-negative integer that will yield a discrete control frequency in proximity to a preferred control frequency of the controlled device.

Claim 28 (original): The computer-readable medium of claim 22, wherein the method further comprises initiating a control loop process on the computing device when electronic communication is established with a controlled device.

Claim 29 (original): The computer-readable medium of claim 22, wherein the method further comprises accessing the computing device from a remote computing device via the Internet.

Claim 30 (original): The computer-readable medium of claim 29, wherein the method further comprises providing information relating to the controlled device to a user at the remote computing device.

Claim 31 (original): The computer-readable medium of claim 30, wherein the method further comprises receiving user input at the computing device from the user at the remote computing device, wherein the input relates to the controlled device.